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Illustrated Wood-Worker.

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*** The ILLUSTRATED WOOD-WORKER will be sent to any person in the United States or Canada, who desires it, post free, on receipt of the above rates.

OFFICE:

No. 176 Broadway, New York City.

CHAS. D. LAKEY, *Publisher.* FRED. T. HODGSON, *Editor.*

All correspondence intended for the columns of the WOOD-WORKER should be sent to the Editor; but letters of a business nature, or which contain money or Post-Office orders, should be addressed to the Publisher. Rejected communications will not be returned unless the persons sending them remit return postage.

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ILLUSTRATIONS.

A Pair of Carved Doors; Sectorian System of Hand-Railing; Writing-Table; Section of Staircase; Bookcase and Writing-Table; Practical Carpentry; Hips and Bevels; Bookcase and Drawers.

PREFATORY.

THREE hundred thousand workers in wood confess the want of a cheap illustrated journal. This initial number must be taken as an indication of a purpose, not as an average sample of the WOOD-WORKER. If this number is favorably received, we can vouch for those that are to follow.

It is our purpose to cover a wide field. The house-joiner, the car-joiner, the cabinet-maker, and other mechanics who work in wood will always find profitable suggestions in these pages. Every man who feels rich enough to subscribe for this journal, by paying one dollar may depend on getting the full worth of his money. We have ample facilities for obtaining the best examples of modern design, and no pains will be spared in making the WOOD-WORKER worthy of the support it seeks.

The objective point of this journal is the workman, not the employer. We wish this to be distinctly understood at the outset. The WOOD-WORKER is specially and solely for men at the bench. Our purpose is to

supply them with material which they can turn to profitable use; to help them in helping themselves. This we shall do by giving them new suggestions both in design and construction.

It is well known that new designs are costly. The designer of a new article of furniture, for instance, must be paid not only for the time he expends in thinking out the details of his work, but for the cost of the original drawing. The completed drawing of the pair of doors on our first page probably cost not less than fifty dollars. Consequently all new books of design are beyond the reach of ordinary workmen. Our purpose is to reproduce drawings in the WOOD-WORKER at a merely nominal price that originally cost hundreds of dollars. Indeed it is safe to assure every subscriber that for the sum of one dollar he shall have at the end of a year a collection of choice designs that would have cost him at least fifty dollars in book form. We shall cull from sources new and old the things which strike us as best suited to the wants of the average wood-worker. Because a good thing has been printed and sold at a high price to a few hundred manufacturers, we shall not deem it the less worthy of publication in popular form.

But a glance at the pages of the WOOD-WORKER will show that its mission is not simply to reproduce. Its pages will be enriched with original drawings, prepared especially to meet the wants of its patrons, as will be more evident in the near future.

All regular subscribers to the *American Builder* will receive the WOOD-WORKER free for one year. We trust they will speak a good word for it, and kindly forward subscriptions. We publish an immense edition of this first issue, and hope to have at least 20,000 *bona fide* subscribers before the year is half closed. It will be an easy matter to accomplish this result if our old friends give the new venture a good strong push. Address all business letters to

CHAS. D. LAKEY, *Publisher,*
176 Broadway, New York City.

To Our Friends.

THIS, the initial number of the WOOD-WORKER, will be sent, postage paid, to many who are not subscribers, in the hope that they may become such.

It is our purpose to make the WOOD-WORKER a lively journal, and one that no wood-working mechanic will not want after seeing and reading a copy, and to publish it at a price that will be within the reach of every workingman.

We intend that nothing new connected with the trades we represent shall escape our notice; and we shall try to present what we

have to say in language that will be readily understood by the class of men for whom we write. We believe it possible to infuse life and interest into subjects which concern the men who toil for a livelihood with hammer, saw, and plane, and as we labor for the people who work with their hands as well as with their heads, we expect to augment our subscription list to mammoth proportions during the year of 1879.

Our Illustrations.

ON the front page we show two doors with carved work on the panels. These doors are designed so that they can be built and finished without the carved additions, or in place of the elaborate work shown any tasteful design may be substituted.

Plate 2 shows the instruments used in the sectorian system of hand-railing, and is fully explained in another place.

On Plate 3 we show a writing-table—elevation and ground plan. This makes a fine office desk, and is not so elaborate but that any good joiner can make it. It would look very well made of white ash with walnut trimmings.

Plate 4 shows section of staircase with newels, balusters, and doors. It will be noticed that the lower newel is placed one step back, so as to give more room in the hall near the door at the foot of the stairs. This feature is worthy of note, inasmuch as it permits of the lower step being placed very near to the door opening without causing inconvenience.

Plate 5 shows a very handsome bookcase and writing-table combined. The design is excellent, and our readers will find many things about it that are worth imitating; we have reproduced it from the *Workshop*.

Plate 6 is illustrative of the article on practical carpentry, which will be found in another column.

Plate 7 shows a method of obtaining the length and curve of a mansard hip. We are indebted for this plate to our esteemed correspondent "Alonzo."

Plate 8 shows a very neat bookcase, one that can be made by any good joiner or carpenter; this would also make a very convenient kitchen cupboard if shorn of a part of the adornments. It will be noticed that the central part, surmounted by the pediment, projects a few inches from the face of the work.

We shall be pleased to receive drawings, for reproduction, of furniture, joiner's work, special tools and appliances, or any thing of interest, from any of our readers.

Isometric Projection.

THIS is a conventional method of representing an object, in which it has somewhat the

appearance of a perspective drawing, with the advantage of the lines situated in the three visible planes at right angles to each other, retaining their exact dimensions. For the representation of such objects, therefore, as have their principal parts in planes at right angles to each other, this kind of projection is particularly well adapted.

Without going into the principles and details of this subject exhaustively here, enough will be explained by illustration to enable the pupil, beginning by imitation of copies, to serve himself sufficiently until he studies the subject fully. The name *isometrical* was given to this method of projection by Professor Farish, of Cambridge, England.

The principle of isometric representation consists in selecting for the plane of the projection one equally inclined to three principal axes, at right angles to each other, so that all straight lines coincident with or parallel to these axes are drawn in projection to the same scale.

The axes are called isometric axes, and all lines parallel to them are called isometric lines. The planes containing the isometric axes are isometric planes; the point in the object projected, assumed as the origin of the axes, is called the regulating point.

(To be continued.)

The Sectorian System of Hand-Railing.

AMONG the many systems of hand-railing that have been introduced within the last fifty years, no one is better adapted to the capacity of the average workman than the system invented by the late William Forbes, architect, Richmond, Va., and published by him in 1873 in book form under the title of "The Sectorian System of Hand-Railing." The work was deserving of much more success than it met with at the time of its publication, for it possesses merits that the practical workman would readily appreciate if he was better acquainted with it. It is not claimed that by this system a better rail can be produced than by other systems; but it is claimed that by the sectorian system a stair-rail can be produced, of any size or shape that may be required, in less time, and from less material, than by any method laid down in any work on the subject; and that a knowledge of hand-railing can be acquired in a shorter space of time. This system requires the use of neither gauge nor elliptic curves, no piece or wreath wider in one part than another, and no piece thicker than the width of the rail.

We are pleased to be able to inform our readers that we have made such arrangements with the executors of the late Mr. Forbes as will enable us to publish, during the year, the whole system—text and plates—with such